

REMARKS

AMENDMENTS TO THE SPECIFICATION

Paragraph [0038] has been amended to correct an obvious typographical error. As such, the instant amendment does not constitute new matter.

AMENDMENTS TO THE CLAIMS

Claims 7 and 8 have been canceled without prejudice.

Claims 2, 3, 4 and 12, 13, 14 have been amended at the suggestion of the Examiner. In more particular, the Examiner has indicated that the phrase “wherein is provided” renders the claim(s) indefinite because the claim fails to show “what” is provided. (*See*, Page 2 of the Office Action).

In response, applicants believe that the original language was not indefinite because, for example, the “what” corresponding to each “wherein is provided” clause may be found immediately following that phrase. However, applicants have modified the indicated claims as suggested. Since these claim modifications merely relocate existing language within each claim, these amendments do not constitute new matter.

Claim 15 has been newly presented to make clearer the invention claimed by the applicants. In more particular, Claim 15 provides an example of the sort of transition parameter that is modifiable in order to synchronize a video work to an audio work. Support for this claim can be found throughout the description of the application, including paragraphs [0029], [0038], [0055] and [0059] through [0063] and, as such, this claim does not constitute new matter.

As a consequence, it is believed that the instant amendments have fully made moot the Examiner's objections associated therewith and, as such, it is further believed that the instant objections should be withdrawn.

New Claims 16 and 17 have been added to make clearer the invention claimed by the instant inventors. In more particular, these claims further limit Claim 9 by requiring that the transition that is selected be a transition effect. As is clearly indicated in, for example, paragraph [0037] of the instant invention, the use of video effects was fully considered and taught by the instant inventors and, as such, these claims do not constitute new matter.

CLAIM OBJECTIONS AND REJECTIONS

Rejections Under 35 U.S.C. 102(e)

Claims 1-14 stand as rejected under 35 U.S.C. 102(e) as being anticipated by Foote (US 2003/0160944). It is said that Foote discloses a method of aligning a video work with an audio work, wherein audio markers are defined in the audio work and video markers are defined in the video work, the video markers are selected and specific video transitions are applied at the position of the video markers, wherein said video transition is synchronized to an audio marker proximate to said video marker, thereby creating an aligned video work. The video transition is said to be synchronized with a selected audio marker. Furthermore, it is said that the video work consists of video clips, wherein these video clips have data attributes describing actual length and displayed length and wherein said synchronization is implemented by selecting a video marker associated with two adjacent video clips and by changing the displayed length of the two adjacent clips.

As an initial matter, it should be noted that, in speaking of anticipation under section 102, the Federal Circuit held in *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984) that:

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.

Accord: *W.L. Gore & Associates v. Garlock, Inc.*, 200 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) that:

Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration.

By way of summary of the arguments that follow, applicants respectfully contend that the Examiner is mistaken in the statement that Foote discloses a method that applies video transitions at positions of defined video markers and furthermore synchronizes these video transitions to selected audio markers. Since it cannot be said that Foote discloses each and

every element of the instant invention set out as is in the claims, the instant rejection under Section 102 should be withdrawn.

Turning first to the rejection of Claim 1 as-amended, consider the following exemplary passage from the instant application “Summary of the Invention” at applicants’ Paragraph [0009]:

There is provided herein a system and method for automatically aligning audio and video tracks of a multimedia work, wherein change points or “markers” are located in the accompanying digital audio work and then transitions are constructed around “breaks” in the video work to give the impression that the two works are in synchronization.

Nowhere within Foote is there a teaching or suggestion that the detected “breaks” or markers in the video work will be used as starting points for the application of transitions, one or more of the parameters of which will be modified in order to synchronize the breaks in the video work with the change points or “markers” in the audio work.

Foote discloses a system and method for aligning video and audio signals for purposes of creating a music video. Foote detects transition points in both the audio and video material and using these transition points seeks to align in time portions of video material to the audio material. Foote utilizes approaches such as Dynamic Programming which is used to align the respective peaks or “transition points” of the video and audio material (paragraph [0058]), threshold based Peak Alignment (paragraph [0063]), and also Tempo Mapping to align the video material with the audio material [0066].

Of course, none of Foote’s embodiments disclose or suggest applicant’s method which involves placement of a transition at a detected video marker and synchronizing the video material to the audio material by changing the parameters of the transition, the length of the transition being one such parameter. Further, the Examiner has failed to provide a citation in Foote that supports his assertion that Foote discloses “selecting a video transition to apply at said selected video marker” and “automatically synchronizing said video transition with said selected audio marker” (Office Action at page 3).

It is admitted, that the term “transition” is present in Foote, however this term is used in the context of “transition points”, wherein the “transition points” in Foote stand for the locations of markers that are detected during a detection step in both audio and video material and that are used as the start point in the alignment process. It should be noted and remembered that Foote’s use of the term “transition point” describes a point in time that has certain spectral properties. On the other hand, the term “transition” as used in the instant invention is used to describe video effects, i.e., “transitions”, that are used to bridge the gap between one video segment and another and that are adjustable to achieve synchronization. See, for example the following exemplary passage from the instant application “Description of the preferred Embodiments” at Paragraph [0037]:

Preferably a transition will be assigned to each of the discontinuities in the video work. Note that the “transition” between two clips might be as simple as an abrupt change from one clip to the next (i.e. no conventional transition) or as complex as computer morphing of the last frame of say, Clip A to match the first frame of Clip B.

Further, although Foote speaks of the selection of “transitions” in the audio and video works, nowhere in Foote is there anything that suggests or teaches that his “transition” should be “applied” to the video work as is required by each claim of the instant invention and then subsequently adjusted to achieve synchronization. Indeed, it does not even make sense to “apply” Foote’s transition *points* to the video work as is required by the instant claims: Foote’s transitions are time points, not transition schemes.

Further, nowhere in Foote is there a description or suggestion of the step of “applying said synchronized video transition to said video work”. This is so because, among other reasons, Foote utilizes a different method of aligning his audio and video works: he lengthens or shortens the surrounding video works. He never selects a modifiable video transition in the sense of the instant invention, and furthermore never synchronizes this video transition to audio markers, and, finally, does not apply the video transition to the work.

As such, it is believed that the cited reference fails to disclose each and every element of the instant invention instant rejection as set out in the Claims, as such the instant rejection under Section 102 of Claim 1 is improper and should be withdrawn.

Turning next to the rejection under Section 102 (e) of Claim 2, it is said that Foote discloses a method according to Claim 1, wherein an audio criteria is selected and wherein the audio criteria at least comprises a rule for identifying change points within said audio work. The detected change points are said to identify the audio markers within said audio work.

In reply, applicant would note that at least for all the reasons identified above, the rejection of this claim is believed to be improper. More specifically, Claim 2 calls for the limitations present in Claim 1 as-amended together with a further requirement that an audio criteria be used to obtain audio markers within the audio work.

As has been discussed previously, Foote does not teach or suggest the use of transitions in aligning audio and video works and, further, does not teach applicants' use of audio criteria to obtain audio markers which are subsequently used to align the audio and video works.

As such, it is believed that the cited reference fails to disclose each and every element of the instant invention as set out in Claim 2, as such, the instant rejection under Section 102 is believed to be improper and should be withdrawn. Further, it is believed that Claim 2, depending as it does from a claim believed to be allowable, should for the same reasons be allowed.

With respect to Claim 3 for at least all of the reasons set out above, it is believed that this claim is allowable. It is said that Foote discloses a method according to Claim 1, wherein a highest priority audio criterion is selected from among a plurality of audio criteria according to a priority ordering and wherein the highest priority audio criterion is used to identify

specific change points in the audio work. The identified change points are set to identify the audio markers within said audio work.

In reply, applicants would once again note that Foote does not disclose or teach applicant's approach to synchronization of audio and video material which involves the use of video transitions that are synchronized with the audio work by modification of at least a length of the transition and then the application of those synchronized video transitions to the video work. Further, Foote does not teach a method of synchronization of audio and video material that utilizes a priority ordering of audio criteria that are used to locate audio markers in the work for use in subsequent automatic alignment. The Examiner offers Figs. 3-7 and paragraphs [0056] and [0063] as support for the instant rejection. However, neither of these references discloses a priority ordering of the audio criteria and a selection of an audio criterion from among said plurality of ordered audio criteria for the identification of audio markers in audio material. Figures 3-7 disclose forms of defining and identifying so called "transition points" in the audio material. However, nowhere in these figures or the description of these figures is there a disclosure that illustrates the use of prioritized audio markers. Paragraph [0056] of Foote discusses different methods of fitting video material to audio segments. This paragraph does not disclose a priority ordering of different audio criteria, which are then used to identify audio markers. Finally paragraph [0063] is concerned with the Peak Alignment process of Foote, wherein a threshold value is determined that is used to equalize the number of audio and video peaks, i.e., a single criterion is utilized. There is no teaching in paragraph [0063] that discloses a priority ordering of audio criteria, which are then used to identify individual audio markers.

As a consequence, it is believed that Claim 3, depending as it does from a claim believed to be allowable as-amended, and further in view of the arguments advanced above, is in condition for allowance, therefore it is believed that the instant objection of this claim should be withdrawn.

With respect to Claim 4, for at least all of the reasons set out above it is believed that this claim is allowable. However it is said that Foote teaches a method according to Claim 1, wherein is provided a criterion for determining whether an audio marker is suitable for use with a selected video marker.

In reply, applicants would once again note that Foote does not disclose or teach applicant's approach to synchronization of audio and video material which involves utilization of video transitions that are positioned at locations of detected video markers, aligning the video transitions with identified audio markers by modifying at least a length of the transition, and applying the synchronized video transitions to the video work. Further, the cited passages of Foote (Figs. 4-7, paragraphs [0054], [0056] and [0063]) do not teach or suggest the use of transitions in video / audio synchronization in combination with audio markers that have been determined to be suitable or not according to a predetermined criterion. As a consequence, it is believed that Claim 4, depending as it does from a claim that is believed to be allowable as-amended and further in view of the arguments advanced above, is in condition for allowance and the instant objection of this claim should be withdrawn.

With respect to Claim 5, for at least all of the reasons set out above it is believed that this claim is allowable. However, it is said that Foote in paragraph [0074] teaches the reading of said stored aligned video work from computer readable medium and playing said video work on a display device.

In reply, applicants would once again note that Foote does not disclose or teach applicant's approach to synchronization of audio and video material that involves incorporation of video transitions at locations of detected video markers, aligning the video transitions with identified audio markers by modifying at least a length of the transition, and

applying the synchronized video transitions to the video work. Further, the cited passage in Foote does not teach a method such as that described above wherein a multimedia work that has been created according to the instant method is read from a computer readable medium and played on a display device.

As a consequence, it is believed that Claim 5, depending as it does from a claim believed to be allowable and further in view of the arguments advanced above, is in condition for allowance and therefore the instant objection of this claim should be withdrawn.

With respect to Claim 6, for at least all of the reasons set out above it is believed that this claim is allowable. However, it is said that Foote teaches the use of a computer readable medium selected from the group consisting of computer RAM, non-volatile RAM, magnetic disk, a RAM card, optical disk, magneto-optical disk, and a floppy disk.

In reply, applicants would once again note that Foote does not disclose or teach applicant's approach to synchronization of audio and video material which involves application of video transitions at locations of detected video markers, aligning the video transitions with identified audio markers by modifying at least a time duration of the transition (*per* Claim 1 as-amended), and applying the synchronized video transitions to the video work. Further, the cited passage in Foote does not teach a method such as that described above wherein a multimedia work has been created according to the instant method and is stored on a computer readable medium selected from the group consisting of computer RAM, non-volatile RAM, magnetic disk, a RAM card, optical disk, magneto-optical disk, and a floppy disk.

As a consequence, it is believed that Claim 6, depending as it does from a claim believed to be allowable and further in view of the arguments advanced above, is in condition for allowance and the instant objection of this claim should be withdrawn.

The instant rejections of Claims 7 and 8 as discussed on pages 5-7 of the Office Action have been made moot by virtue of the claim amendments offered above. In more particular, applicants have requested that Claims 7 and 8 both be canceled without prejudice.

Turning next to the rejection of independent Claim 9 as is set out on page 8 of the Office Action, for at least all of the reasons set out above it is believed that this claim is allowable. However, it is said in the Office Action that Foote teaches each and every step of Claim 9.

In reply, it should be noted that nowhere within Foote is there a teaching or suggestion that an audio and video work may be synchronized by modifying parameters associated with a video transition that has been placed into the work for that purpose. In more particular, Foote synchronizes a video and an audio work by adjusting the lengths of the component video clips and/or the timing between video transition points in the video work. The instant application, though, takes an opposite approach: transitions are inserted at appropriate points in the video work and parameters of the inserted transitions are modified in order to cause the audio and video works to appear to be in sync. In one preferred embodiment, the lengths of those transitions are adjusted in order to synchronize the video and audio works. (See, for example, new Claim 15 which makes this clearer).

Foote, of course, does not take this approach and rather modifies the lengths of the video clips that are bounded by successive Foote-defined “transitions” in order to produce synchronization. Certainly, applicants could find no instance in Foote where he modified a parameter of a transition in order to achieve synchronization between an audio and a video work.

Further, the Examiner has failed to provide a teaching or suggestion in Foote wherein Foote selects a video transition to apply to the video work at a selected video marker as is required by Claim 9.

As such, it is believed that for at least all of the above reasons Foote does not disclose each and every element of Claim 9 as set out in the claim. As such, it is believed that the instant rejection should be withdrawn and this claim allowed to issue.

With respect to Claim 10, for at least all of the reasons set out above it is believed that this claim is allowable. However it is said that Foote in Paragraph [0074] teaches the writing of said aligned video work and said audio work to a computer readable medium.

In reply, applicants would once again note that Foote does not disclose or teach applicant's approach to synchronization of audio and video material which involves incorporation of video transitions at locations of detected video markers and aligning the video transitions with identified audio markers by changing at least one transition parameter and applying the synchronized video transitions to the video work. Further, the cited passage in Foote does not teach a method such as that described above wherein an aligned video work and audio work that has been created according to the instant method is written to a computer readable medium.

As a consequence, it is believed that Claim 10, depending as it does from a claim believed to be allowable and further in view of the arguments advanced above, is in condition for allowance and therefore the instant objection of this claim should be withdrawn.

With respect to Claim 11, for at least all of the reasons set out above it is believed that this claim is allowable. However, it is said that Foote teaches the use of a computer readable medium selected from a group consisting of computer RAM, non-volatile RAM, magnetic disk, a RAM card, optical disk, magneto-optical disk, and a floppy disk.

In reply, applicants would once again note that Foote does not disclose or teach applicant's approach to synchronization of audio and video material that involves incorporation of video transitions at locations of detected video markers and aligning the video transitions with identified audio markers by changing at least one transition parameter and applying the synchronized video transitions to the video work. Further, the cited passage in Foote does not teach a method such as that described above wherein a multimedia work has been created according to the instant method and is stored on a computer readable medium selected from the group consisting of computer RAM, non-volatile RAM, magnetic disk, a RAM card, optical disk, magneto-optical disk, and a floppy disk.

As a consequence, it is believed that Claim 11, depending as it does from a claim believed to be allowable and further in view of the arguments advanced above, is in condition for allowance and the instant objection of this claim should be withdrawn.

Turning next to the rejection under Section 102 (e) of Claims 12-14, it is said that these claims are rejected under the same rationale as Claims 2-4 respectively.

In reply, for at least all of the reasons indicated above, and in particular for those reasons indicated in connection with applicant's arguments for the allowability of Claims 2-4 above, it is believed that these claims are allowable.

In more particular, Claims 12-14 depend from Claim 9, which is believed to be allowable.

Further, Claims 12-14 require, by virtue of their dependence on Claim 9, that a video transition be selected, that the selected transition be synchronized with an audio marker by adjusting at least one of its parameters, and that the synchronized video transition be applied to be video work. Nothing in Foote teaches or suggests this approach.

Further, with respect to Claim 12, nothing in Foote teaches or suggests the use of modifications of at least one video transition parameter to synchronize a video and an audio

work and, further nothing in Foote suggests the foregoing in a scenario where at least one selected audio criterion is used to select change points within the audio work.

As such, it is believed that the cited reference fails to disclose each and every element of the instant invention as set out in Claim 12, as such, the instant rejection under Section 102 is improper and should be withdrawn.

With respect to Claim 13 for at least all of the reasons set out above, it is believed that this claim is allowable. It is said that Foote discloses a method according to Claim 9, wherein a highest priority audio criterion is selected from among a plurality of audio criteria according to a priority ordering and wherein the highest priority audio criterion is used to identify specific change points in the audio work. The identified change points are set to identify the audio markers within said audio work.

In reply, with respect to Claim 13 nothing in Foote teaches or suggests the use of modifications of at least one video transition parameter to synchronize a video and an audio work and, further nothing in Foote suggests the foregoing in which a plurality of audio criteria are selected for determining change points in an audio work, and wherein a highest priority audio criterion is selected from among the selected criteria for use in determining audio change points.

As a consequence, it is believed that Claim 13, depending as it does from a claim believed to be allowable and further in view of the arguments advanced above, is in condition for allowance, therefore it is believed that the instant objection of this claim should be withdrawn.

With respect to Claim 14, for at least all of the reasons set out above it is believed that this claim is allowable. However, it is said that Foote teaches a method according to Claim 9,

wherein is provided a criterion for determining whether an audio marker is suitable for use with a selected video marker.

In reply, with respect to Claim 14 nothing in Foote teaches or suggests the use of modifications of at least one video transition parameter to synchronize a video and an audio work and, further nothing in Foote suggests the foregoing in which a criterion is provided for determining whether or not an audio marker is suitable for use with a video marker.

As a consequence, it is believed that Claim 14, depending as it does from a claim believed to be allowable and further in view of the arguments advanced above, is in condition for allowance and the instant objection of this claim should be withdrawn.

Finally, and with respect to new Claims 15 – 17 offered *supra*, nothing in Foote teaches or suggests the use of modifications of at least one video transition parameter to synchronize a video and an audio work, wherein the transition parameter that is chosen is a length of the transition as is required by applicants' Claim 15.

Similarly, and with respect to new Claims 16 and 17, nothing in Foote teaches or suggests the use of modifications of at least one video transition parameter to synchronize a video and an audio work wherein the video transition is a video effect as is required by Claim 16. Similarly, the subject matter of Claim 17, which has the further limitation with respect to Claim 16 that the transition effect be chosen from a group of common video effects, is similarly undisclosed in Foote.

As a consequence, it is believed that new Claims 15 - 17, depending as it does from a claim believed to be allowable and further in view of the arguments advanced above, is in condition for allowance and the instant objection of this claim should be withdrawn.

In view of the foregoing, the applicants believe that the rejections and objections offered by the Examiner have been overcome and should be withdrawn. The claims as-filed are in condition for allowance and should be passed to the issue branch. Early and favorable action is earnestly solicited.

Respectfully submitted,



07/03/2007

Terry L. Watt

Date

Registration No.: 42,214

Fellers, Snider, Blankenship, Bailey &
Tippens

The Kennedy Building
321 South Boston, Suite 800
Tulsa, OK 74103-3318
Phone: (918) 599-0621
Fax: (918) 583-9659